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ABSTRACT

The study was conducted to determine which variables present among nursery school children influence a child's perception of his teacher's role as a problem solver. The variables tested for included: (1) the race of the teacher; (2) the nature of the problem--one involving personal needs (affective) or one involving classroom achievement (instrumental); (3) the race of the child needing help; and (4) the sex of the child needing help. Subjects (black and white) included 26 boys and 35 girls ranging in age from 3 1/2 to 5 years. The subjects were shown twelve videotaped scenes each containing two children and one teacher--the children being of the same sex but of different race. Eight of the twelve scenes depicted one child with an instrumental problem--the other with an affective problem. The other four scenes were conflict scenes depicting two children both trying to get control of the same toy. After showing each scene the subject was asked to state which child the teacher would help. Findings indicate that neither the teacher's race nor the race or sex of the child helped influence a child's perception of his nursery school teacher. For middle class children, the only variable limiting the teacher's otherwise inclusive role is her principle responsibility to solve affective problems. The results of the conflict scenes proved not useful to this study. (MS)

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FINAL REPORT

O.E.O. #CG 9922

The Child's Perception of the Nursery Teacher

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Summary and Conclusions

The study was conducted to determine which variables present among nursery school children influence a child's perception of his teacher's role as problem solver. The variables tested for included: 1) the race of the teacher; 2) the nature of the problem - one involving personal needs (affective) or one involving class-room achievement (instrumental); 3) the race of the child needing help; 4) the sex of the child needing help.

The subjects, totalling sixty-one, included twenty-six males and thirty-five females. By sex and race there were eight black males sixteen black females, eighteen white males, and nineteen white females. They ranged in age from three and one-half years to five years; the median age was three years and ten months.

The subjects were shown twelve video taped scenes each containing two children and one teacher - the children being of the same sex but of different race. Eight of the twelve scenes depicted one child with an instrumental problem - the other with an affective problem. The other four scenes were conflict scenes depicting two children both trying to get control of the same toy. After showing each scene, the subject was asked to state which child the teacher would help.

It was found that the white subjects from the middle class

chose children with affective problems. whereas black subjects from the lower class did not preferentially choose children with either affective or instrumental problems. The results of the conflict scenes proved not useful to this study.

The choices made by the middle class subjects corroborates Hess's findings that learning for children of this class is influenced by an affective (or instructive) attitude. Since our findings prove that nursery school children of a middle class population do expect the teacher to solve affective problems. clearly a teacher at this level must be able to provide for such needs.

Results for black children of the lower class were not conclusive. Possibly, a larger sample would have yielded results similar to Hess's conclusions about the influence of the instrumental (or imperative) attitude for lower-class children. On the other hand. these children may view the teacher's role as inclusive - not limited to solving only one type of problem. Further research is needed to produce a conclusive answer.

Whether subjects are from the lower or middle classes. evidence of their perception of the teacher's role will be tenuous until a better measurement of ego-centrism can be developed, since an accurate indicator would differentiate between those children who can empathize and those who cannot. The child who can empathize knows how someone else who has a stomach ache or who can't solve a puzzle feels. He can also distinguish

between the role of another - in this case, his teacher - and himself. When asked a sufficient number of times to choose which of two problems his teacher would solve, he would show a predilection for either the affective or instrumental problem, depending upon which attitude had influenced his learning and, accordingly, his definition of the role of the person teaching him. Thus an accurate measure of ego-centrism would likely produce results that would differentiate by attitude, children from the lower and middle classes and indicate, as a consequence, preferences more dominant than those contained in this pilot study.

From these findings it is clear that neither the teacher's race nor the race or sex of the child helped influence a child's perception of his nursery school teacher. For middle-class children, the only variable limiting the teacher's otherwise inclusive role is her principle responsibility to solve affective problems.

NARRATIVE

A. General Statement of Problem

One of the major dictums derived from learning theory is that first experiences with an object, person, or event tend to generalize more than later experiences and, consequently, determine how later experiences will be interpreted. This theory becomes increasingly pertinent as, more and more, the child's first contact with a teacher and a school system is at the pre-school level. Such a development has been accentuated especially in the working class by the Headstart program.

The child in his first contact with the teacher and the school situation brings into play his cognitive equipment (ego-centrism, concreteness, etc. - see Sigel, Reference No. 11) and the attitudes toward the school and the teacher learned from the home environment. As to the latter, we have some evidence from the work of Hess (Reference No. 8) that the middle class child's attitude learned from his environment, especially from his parents, differs from that of the working class child's attitude. The middle class child is taught that the school is a place to learn, whereas for the working class child, it represents an instution which itself must be dealt with along with its attendant authority. His role, then, is defined as one of passivity and compliance rather than one of learning.

As Bruner (Reference No. 3) says, "It is common observation that there are differing attitudes toward intellectual activity characterizing different social classes, the two sexes, different

age groups, and different ethnic groupings. These culturally transmitted attitudes pattern the use of mind. Some cultural traditions are, by count, more successful than others in the production of various patterns - the Jews, for example, in the production of scientists, scholars, and artists."

The importance of the teacher not only as a transmitter of knowledge but as a transmitter of values can also be amply documented. Bronfenbrenner and his colleagues (Reference No. 2) discovered that the child's report of his teacher's behavior toward him showed a higher relationship to his value orientation than did his report of his parent's behavior. Schmuck and Egmond (Reference No. 12) also found that the relationship with the teacher was important in effecting academic performance, and particularly for boys, was more important than the parents' attitudes toward school. Both found that a positive relationship with the teacher was effective in socializing the child toward adult values - moral values in one case and academic in the other.

Bruner (Reference No. 3) also argues that "Since the relation of instructor to student - whatever the formal status of the instructor may be, whether teacher or parent - involves the relation between one who possesses something and one who does not, there is always a special problem of authority involved in the instructional situation. The regulation of this authority relationship affects the nature of the learning that occurs, the degree to which a learner develops an independent skill, the

degree to which he is self-confident of his ability to perform on his own, and so on. Such matters as identification with teacher or parent, the nature of the learner's attitude toward instruction, and the rest - all of these effect the quality of learning. No instructional institution can avoid the task of deciding how to regulate this matter. The relation between one who instructs and one who is instructed is never indifferent in its effect upon learning."

Sears and Dowley state that (Reference No. 10), "It should be mentioned that firm knowledge of the effect of teaching methods or roles cannot be gained without taking into account characteristics of the children toward whom the methods are directed. It is clear by now that 'method' cannot be abstracted from the interpersonal setting; methods are employed by teachers having certain characteristics and they are directed toward children with certain characteristics. Shorn of these factors, statements about a method must necessarily be stated in such tentative terms that they are of little value."

Finally, although there have been a number of hypotheses concerning the differential effect of negro teachers in comparison to white teachers upon negro children, no study as yet has documented the fact that negro teacher-child interactions are perceived in any different manner by negro children.

One might therefore conclude that any question of effectiveness of Method A or B in any type of pre-school program is

a futile one. It is not the teacher's actions alone, but the child's perception of the teacher's actions which effect his response. His perception, however, is contingent upon numerous variables. one being, possibly, the teacher's race and another being, definitely, the content the teacher is presenting.

B. Related Literature

Although there have been a number of studies of styles of teaching in nursery school (Reference No.10), from a review of Gage no direct work could be found on the perception by children of the nursery school teacher. In fact, the literature regarding person-perception in children and particularly the child's concept of social interaction, no less perception of the teacher, tends to be scanty. A few experiments based upon Piaget's (Reference No. 9) concept of decentering have indicated that egocentrism does dominate the child's perception of others at the three-year old level and that with increasing age the child's comprehension of social interaction, his understanding of the motives and emotions of adults, improved. Decentering ability also seems related to intelligence (Reference No. 5), but no empirical work has related it to race or social class variables when intelligence is controlled for.

The study of Feigenbaum, Geiger and Crevoshay (Reference No. 6) verified the above and also indicated that children understand competitive interaction better than cooperative. An

additional finding of the study was that children understood child-child interaction better than adult-adult and adult-child interaction.

Again, tangentially to the problem of perception of the nursery school teacher, Baldwin and his associates have done work on cognitive socialization based upon Heider's (Reference No. 7) theory of naive behavior. The areas of his exploration have included a study of children's judgements of the generosity or the benevolence of another person's act, the concept of fairness, and an investigation of the punishment that children assign to crimes under a variety of contextual conditions. In summary, Baldwin's studies have shown that "preschool children judge that another person's intentions are expressed in his choice behavior, but that there are two problems that preschool children have not yet resolved in their interpretation of choice behavior. One of these is that preference is a dispositional variable so that the same choice should be expected from a sequence of choices between the same two alternatives, or that the same choice would have occurred had the objects been arranged differently in their spatial location. Secondly, the preschool child has great difficulty in recognizing when he does not have enough information to make a judgement of another person's motiviation. The willingness of the child to say he "cannot tell" in ambiguous situations increases sharply with age. Thirdly, we have found

PS 005146

that even at the preschool level, children combine algebraically the various consequences of an action and judge that an act which has two desirable consequences is more likely to be chosen than an act which has one undesirable and one desirable consequence. Children also interpret one bit of behavior by an individual as reflecting a relatively permanent characteristic which he then uses to predict future behavior of the same person." Regarding the structure of ethical judgement in children, "We find a steady increase with age in children's consistency in describing a fair solution to a problem as one that equates the benefits to the various participants that are involved...and we find that there is also a clear age trend in children's recognitions that the person who invested the most effort in order to gain a benefit has more claims to enjoy the benefits than does the child who did not invest that effort."

C. Background

The rationale for the present study of the child's perception of the nursery teacher is an extension of the studies of mothers' attitudes toward the role of the teacher as reported by Hess (Reference No. 8). Hess studied the differences in the intellectual attitudes (specifically, perception of the role of the nursery school and the teacher) among mothers of differing social classes. He describes some early results in the following way:

> The interview (with each mother) included a number of semi-structured techniques designed to elicit attitudes toward the school and the teacher. The most useful technique on this point was the question: "Let's just

imagine that (child)is old enough to go to school for the first time. How do you think you would prepare him? What would you do or tell him?" Two typical responses of the mothers were these:

1) "First of all I would take him to see his new school. We would talk about the building, and after seeing the school I would tell him that he would meet new children who would be his friends; he would work and play with them. I would explain to him that the teacher would be his friend, would help him and guide him in school, and that he should do as she tells him to. That she will be his mother while he is away from home.

2) "Well I would tell him he is going to school and he has to sit down and mind the teacher and be a good boy, and I show him how when they give him milk, you know, and how he's supposed to take his straw and do, and not put nothing on the floor when he gets through.

Hess classifies these two different attitudes as instructive and imperative. There are implications in Hess's work that these two attitudes would also hold true for a classroom situation. While our definitions of affective and instrumental do not exactly parallel Hess's definitions of instructive and imperative, the early reports of conclusions by Hess raise some interesting questions for our study. Hess reported that upper social class mothers took an instructive approach with their children while the approach to learning of lower class mothers was much more imperative.

Just from the two responses by mothers quoted above, it is obvious that some children entering nursery school would expect the teacher to be a friend and to meet their needs as defined by them. Others, however, would expect the teacher to

define the situation and help them meet their needs as defined by the teacher.

D. Purpose

The purpose of this pilot study was to explore the nursery school child's understanding of the role of the teacher in a variety of inter-personal situations involving the teacher and the child. Specifically, we asked and answered four questions:

1. Do nursery school children use the race of a teacher as a variable in determining whether or not a teacher will help a particular child?
2. What kind of problem does the child believe a teacher should or would help a child with - one involving personal needs (affective) or one involving classroom achievement (instrumental)?
3. Do blacks and whites perceive the role of the teacher differently? Are there other variables involved?
4. Do children of different sexes perceive the role of the teacher differently?

E. Method and Procedure

Our testing methods centered around the use of twelve video-taped scenes using two children and a nursery school teacher. Eight were designed to test whether the sample pop-

ulation saw the nursery school teacher as someone who would help a child with an affective problem (stomach ache) or an instrumental problem (inability to do a puzzle). There were three other variables built into the scenes - race of the child (black or white), race of the nursery school teacher (black or white), and sex of the child. After showing each scene the subject was asked to tell which of two children of the same sex, but of different race, the teacher would help. The four other scenes were conflict scenes in which the same three variables and the same choices were present as in the eight previous scenes. (See Appendix for pictorial depiction of the twelve scenes).

Video Scenes

Each of the eight testing scenes shows two children of the same sex but of different race. In each scene, one child has a stomach ache (affective), the other needs help with a puzzle (instrumental); then the teacher enters. Before each testing session, the children were shown a warm-up scene of nursery school classroom activity and asked to answer the question: "Where are the children? What are they doing?" After each of the eight testing scenes were shown, the children were asked the following questions:

1. What did you see?
   a. What happened?
   b. What will happen next?
   c. How does the teacher in the scene feel?
   d. How does the child working the puzzle feel?
   e. How does the child with the stomach ache feel?

2. What will the teacher do? Which one will the teacher help first?

The children were also presented with four conflict scenes, showing two children of the same sex but of different race both

trying to get control of the same toy. A teacher then enters the room. The children were asked the following questions:

1. What did you see?
   a. What happened?
   b. What will happen next?
   c. How does the teacher feel in the scene?
   d. How does the child feel?

2. What will the teacher do? Which one will the teacher help? Why?

The subjects were also given the Feffer Role Taking Test, the Peabody Tests, and the Piaget Colored Box and Black Box Tests. These tests were given to each child to determine the extent of his social learning - specifically to measure his ability to know the motives and emotions, different from his own, of another human being. The Peabody Test is a general intelligence test, and it has been shown to have a low correlation with general social learning ability. The Piaget Colored Box and Black Box tests are a measure of physical de-centering while the Feffer Test is a measure of emotional de-centering.

Peabody Picture Vocabulary Test

The Peabody Picture Vocabulary Test, requiring subjects to match words with pictures, is designed to provide an estimate of a subject's verbal intelligence by measuring his hearing vocabulary. Because subjects taking this test are not required to read, it has been used extensively with culturally deprived children.

The materials used consisted of a book of plates with four pictures on each page. The tester first said a word, then asked the subject to point to the one picture on each page which corresponded to that word. Scoring was based on standardized procedure. For further information, consult Dunn (Reference No. 4).

Piaget Perspective Taking Test - Part I (Colored Box Test)

Materials: Cardboard box which had one side painted blue, one red, one yellow, and one green.

Procedure:

1. The child was asked to walk around the box identifying the color on each side.
   a. If child could not identify a color, the tester taught it to him. The child was given three trials in which to name the color correctly.
2. Tester stood across from the child on opposite side of box. The child was asked what color the tester was looking at. This was done four times, once with each side of the box.

Scoring and Criteria:

1. Would not respond- child would not participate in task.
2. Could not identify colors - child was unable to name colors even after tester told him what they were.
3. _____;_____;_____;_____. - If child named color the tester was looking at correctly, he received an "R" in the blank; if incorrectly, he received a "W".

Piaget Perspective Taking Test - Part II (Black Box Test)

Materials: Large cardboard box with windows in two opposite sides. Inside were placed a mountain, a tree, and a car. The three objects were arranged so that from one side all three objects could be seen, but from the other side only the mountain and the tree could be seen.

Procedure:

1. Tester asked child to look inside the window on both sides of box and identify what he saw from each side.
   a. If necessary, tester corrected or helped child to identify objects.
2. Tester stood across from child and asked child what he (the tester) could see.

Scoring and Criteria:

1. How the child identified the objects was recorded.
2. _____;_____. - "R" in the blank means child named all the objects the tester could see; "W" means the child was incorrect.

Feffer Role Taking Test

Materials: three stories and corresponding pictures, each mounted on a cardboard card.
Story #1 - A story about Thanksgiving
Story #2 - A story about shopping
Story #3 - A story about a bus

Procedure: Each child was read two stories - Story #1, and depending on sex, either #2 or #3.

1. Tester asked child to identify characters in picture.
   a. If child did not respond, tester pointed to figure and asked, "Who is this?" then, "What is he doing?"
   b. If child responded incorrectly, then tester assured child that he had given a good response, but then told the child what was in picture.
2. Tester said, "Now I"m going to read you a story about this picture. I want you to listen carefully so that you can tell the story when I"m finished."
   a. If child did not respond when asked to retell story, tester prompted child with "What happened in the story?" or "What were the people doing in the story?"
3. Tester said, "What would you do if you were the _____ (one of the characters in the story)?"
   a. If child did not respond, tester prompted child with "Let's pretend you are the _____(character). What would you do?"

Scoring and Criteria:

1. Use of figures - at least one mention of a person, either by name or role.
2. No use of figures.
3. Use of pronouns - use of at least one pronoun, only if child could retell story. Did not count pronouns in egocentric response.
4. No use of pronouns.
5. Unable to retell - no response, outside of "uh-uh" or "I don't know."
6. Told story inclusively -
   Story #1 - identified Indian and Pilgrims (man-lady, mommy-daddy) and mentioned eating
   Story #2 - identified Mommy (lady), girls (Mary, Jane) and mentioned groceries.
   Story #3 - identified boys and driver, distinguished between boy pretending and driver really driving.
7. Told story noninclusively - if child did not fulfill #6.

8. Egocentric response - any response which dealt with the child's own feelings or ideas, not in response to the task at hand; out of context; "I forgot."
9. Space action - use of at least one verb.
10. Emotional state - response dealing with the feelings of the characters in the story.
11. Characterization - combination of space action and emotional state.
12. Acting out - any attempt child made to physically portray a character.
13. Accurate - (role play only) - attributing actions to the characters within the context of the story.
14. Inaccurate - (role play only).

Population

A total of sixty-one subjects, ages three to five in seven nursery schools, were tested. It was planned to evenly divide the population by sex, race and social class; however, no nursery school could be found whose pupils were in the upper social class and were also black; the black population is exclusively from lower class families.

There were twenty-six male subjects and thirty-five female subjects; twenty-four of the subjects were black and thirty-seven were white. By sex and race there were eight black males, sixteen black females, eighteen white males and nineteen white females. Ten subjects were three and one-half years old. Twenty-eight were from three and one-half to four years old, and twenty-three were from four to five years old. The median age of the subjects was three years and ten months.

Numbers of subjects by race, sex, and median chronological age are shown in the table on the next page.

AGE - CHRONOLOGICAL AND MENTAL

S U B J E C T S		No.	Median Chron. Age
	Black Females	16	3/11
	Black Males	8	3/11
	Total - Black Children	24	3/11
	White Females	19	3/11
	White Males	18	3/10
	Total - White Children	37	3/11

F. Results

A number of analysis of variances were performed on the data. Table 1 presents an ANOV (Analysis of Variances) in which A is a P.P.V.T. split on the median; B represents the race of the child making the choice; C the sex of the S making the choice; D, the choice - stomach ache or puzzle; E, the race of the child chosen; and F, the sex of the child chosen.

Table 1
Analysis of Variance of:
Race and Sex of Chooser, Choice Made, and Race and Sex of Child Chosen

	Source of Variation	df	MS	F
Between Groups:	A	1	.0025	.0825
	B	1	-	-
	C	1	.1263	4.1683 *
	AB	1	.0239	.7887
	AC	1	.1263	4.1683
	BC	1	.0064	.2112
	ABC	1	.092	3.0363
	Ss within groups	48	.0303	
Within Subjects:	D	1	.6733	-
	AD	1	.4718	-
	BD	1	3.5903	1.9166
	CD	1	.2184	-
	ABD	1	.1121	-
	ACD	1	.5981	-
	BCD	1	1.5644	

Source of Variation	df	MS	F
ABCD	1	.2935	-
D by Ss within groups	48	1.8732	-
E	1	.4931	-
AE	1	.0162	-
BE	1	1.2682	-
CE	1	.0324	-
ABE	1	.0064	-
ACE	1	.0628	-
BCE	1	.0421	-
ABCE	1	.057	-
E by Ss within groups	48	2.0123	-
F	1	-	-
AF	1	.1049	-
BF	1	-	-
CF	1	.1218	-
ABF	1	.0194	-
ACF	1	.0136	-
BCF	1	.1503	-
ABCF	1	.1756	-
F by Ss within groups	48	2.0439	-
DE	1	-	-
ADE	1	.0661	-
BDE	1	-	-
CDE	1	-	-
ABDE	1	.044	-
ACDE	1	-	-
BCDE	1	.3019	-
ABCDE	1	.0304	-
DE by Ss within groups	48	1.7884	-
DF	1	.0745	.039
ADF	1	.0045	.0024
BDF	1	.9358	.5122
CDF	1	.3324	.1819
ABDF	1	.0362	.0198
ACDF	1	.1412	.0772
BCDF	1	.011	.006
DF by Ss within groups	48	1.8268	-
EF	1	.1322	-
AEF	1	-	-
BEF	1	-	-
CEF	1	-	-
ABEF	1	-	-
ACEF	1	-	-

Source of Variation	df	MS	F
BCEF	1	-	-
ABCEF	1	.4705	.2387
EF by Ss within groups	48	1.971	-
DEF	1	.1108	-
ADEF	1	.02	-
BDEF	1	.1108	-
CDEF	1	.0233	-
ABDEF	1	.2229	-
ACDEF	1	.6014	-
BCDEF	1	.0174	-
ABCDEF	1	-	-
DEF by Ss within groups	48	1.707	-

The only significance, from this analysis, occurs between subjects F=4.1683 (F 48 $<$ .05), indicating that, overall, female Ss made more choices than male subjects which is a meaningless result in terms of the intent of the study. Additionally, there were not enough Ss in each group to give enough power to delineate the relationship among choices made and subject characteristics. Therefore, another ANOV was performed - Table 2.

Table 2

Analysis of Variance of:
Race and Sex of Chooser, Choice Made, Race of Teacher and Race of Child Chosen

A= Race of S C= Choice E= Race of Child Chosen
B= Sex of S D= Race of Teacher

Source of Variation		df	MS	F
Between Groups:	A	1	.0171	.5377
	B	1	.0911	2.8647 *
	AB	1	.0013	.0408
	Ss within groups	52	.0318	-
Within Subjects:	C	1	3.4079	1.9371 *
	AC	1	2.96	1.6825 *
	BC	1	.8272	.4702
	ABC	1	.0066	.0037
	C by Ss within groups	52	1.7592	-

* $>$ .05 $<$ .10

Source of Variation	df	MS	F
D	1	.0528	.0278
AD	1	.3845	.2025
BD	1	.3105	.1635
ABD	1	.1387	.073
D by Ss within groups	52	1.8985	-
E	1	.296	.1569
AE	1	1.2408	.6577
BE	1	.0568	.0301
ABE	1	.0449	.0238
E by Ss within groups	52	1.8863	-
CD	1	1.2725	.7428
ACD	1	.0832	.0485
BCD	1	.0832	.0485
ABCD	1	.0066	.0038
CD by Ss within groups	52	1.7131	-
CE	1	.0555	.0323
ACE	1	.0145	.0084
BCE	1	.2233	.1301
ABCE	1	.0105	.0061
CE by Ss within groups	52	1.7158	-
DE	1	.5933	.3247
ADE	1	.8166	.4469
BDE	1	.4056	.2219
ABDE	1	.074	.0404
DE by Ss within groups	52	1.8272	-
CDE	1	.0528	.0325
ACDE	1	.0713	.0439
BCDE	1	.074	.0456
ABCDE	1	-	-
CDE by Ss within groups	52	1.622	-

In this second ANOV we eliminated P.P.V.T. and replaced sex of the child chosen with the race of the child chosen. Again, we found the relationship between Ss for sex ($F = 2.8647 > .05 < .10$) uninterpretable. But we also found that within Ss, the main effect approaches significance $F = 1.9371$ and the AC interaction (race of chooser x choice) $F = 1.6825$ ($P < .10 > .05$). Our inter-

pretation of these results is that white Ss chose children with stomach aches much more than with puzzles, but black Ss did not choose very differently. Overall, they all chose the stomach ache more than the puzzle.

A third ANOV (See Table 3) was performed where the sex of the chooser was taken out to raise the power and subjects were divided only by race.

Table 3
Analysis of Variance of:
Race of Subject, Choice Made, Race of Teacher and
Race of Child Chosen

A= Race of S
C= Choice Made
D= Race of Teacher
E= Race of Child Chosen

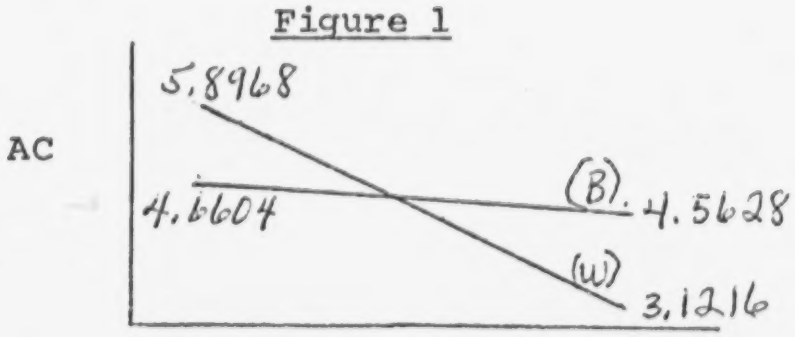
	Source of Variation	df	MS	F	
Between Groups:	A	1	.0357	1.1052	
	Ss Within Groups	54	.0323	-	
Within Subjects:	C	1	7.0851	4.1445	*
	AC	1	6.1538	3.5997	*
	C by Ss within groups	54	92.3165	1.7095	
	D	1	.1098	.0683	
	AD	1	.7994	.4978	
	D by Ss within groups	54	86.7043	1.6056	
	E	1	.6153	.3382	
	AE	1	2.5796	1.4182	
	E by Ss within groups	54	98.2162	1.8188	
	CD	1	2.6456	1.8542	
	ACD	1	.173	.1212	
	CD by Ss within groups	54	77.0508	1.4268	
	CE	-	-	-	
	ACE	-	-	-	(N.S.)
	CE by Ss within groups	-	-	-	
	DE	-	-	-	
	ADE	-	-	-	(N.S.)
	DE by Ss within groups	-	-	-	

Source of Variation	df	MS	F
CDE	-	-	-
ACDE	-	-	-
CDE by Ss within groups			

* >.05 <.10

In this analysis the choice becomes significant (F 1& 54 = 4.1495) p<.05) with more children chosen with stomach aches than with puzzles. The interaction (AC) representing the race of the chooser and the choice also approached significance (p <.10 >.05) with the white subjects choosing more stomach aches than puzzles, (See Figure 1 below).

Figure 1



From the three tables, a major conclusion to be drawn is that because white subjects strongly chose children with stomach aches, middle class children perceive the teacher's role as affective rather than instrumental. The black subjects viewed the teacher's role less definitively than white subjects did, but their designation tended to be more affective than instrumental.

Results of lesser importance were obtained by a chi-square analysis of the first eight scenes (See Table 4 below).

Table 4
Chi-Square Analysis of Scenes 1-8

Scene One
White Male - Stomach Ache

Scene One (cont.)		
Black Male - Puzzle	$x^2 = .089$	df = 3
White Teacher	(N.S.)	
Scene Two		
White Female - Stomach Ache		
Black Female - Puzzle	$x^2 = 1.6687$	df = 3
White Teacher	(N.S.)	
Scene Three		
White Male - Puzzle		
Black Male - Stomach Ache	$x^2 = 10.061$	$.01 < p < .02$
White Teacher		df = 3
Scene Four		
White Female - Puzzle		
Black Female - Stomach Ache	$x^2 = 11.245$	$.01 < p < .02$
White Teacher		df = 3
Scene Five		
White Male - Puzzle		
Black Male - Stomach Ache	$x^2 = 6.2948$	$.05 < p < .10$
Black Teacher		df = 3
Scene Six		
White Female - Stomach Ache		
Black Female - Puzzle	$x^2 = .94$	df = 3
Black Teacher	(N.S.)	
Scene Seven		
White Male - Stomach Ache		
Black Male - Puzzle	$x^2 = 5.364$	$.10 < p < .20$
Black Teacher		df = 3
Scene Eight		
White Female - Puzzle		
Black Female - Stomach Ache	$x^2 = 1.537$	df = 3
Black Teacher	(N.S.)	

The results are significant for only a few scenes - particularly scenes three and four where both white male and female subjects chose the black female (in scene four) and the black male (in scene five) with the stomach ache. This pattern of choosing the affective problem, which corresponds to our conclusions from the

three tables, is altered in scene five where the presence of the black teacher lessened the number of times white subjects chose the child with the stomach ache. Since the results indicate that the teacher's race is slightly significant in this scene and insignificant for the other scenes, it can be concluded that the race of the teacher is not an important variable. For the nursery school child, his teacher's race is inconsequential.

Scene five also produced greater than chance results for black subjects' choices. Both black males and females chose the white child with the puzzle. This inclination to perceive the teacher's role as instrumental is counter to the findings of the third ANOV where the AC interaction between race of subject and choice produced a slight tendency among the black subjects to view the teacher's role as affective, (See Figure 1).

The results of scene seven, with white male subjects choosing the white male with the stomach ache, add support to our major conclusion that the mainly middle class subjects strongly favored the affective problem.

Differences of choice did not coorelate with the subjects' I.Q's, as measured by the P.P.V.T. A series of chi-square tests were run, but no statistical differences existed between any of the four sex/race groups.

The Piaget Perspective Taking Test also did not differentiate responses to the scenes. Though most of the subjects performed well on the tests, some of the lower class subjects did less well

than others. Thus the results were partially related to social class but not significantly so as to coorelate with the subjects' choices.

The Feffer Role-Taking Test was a difficult task for a large majority of the children and did not allow for analysis.

The conflict scenes proved not useful for our study since many of the children refused to make a choice as to which child the teacher would help, saying the teacher would help both - thus recognizing a cooperative resolution rather than one showing favoritism by the teacher. This is an unexpected result since one would expect that being in the period where heteronomous morality should dominate, favoritism should be present. The small number of choices made it unnecessary to perform a chi-square analysis of these four scenes.

Some social class differences among our students appeared in the Piaget tests (as mentioned), the Feffer test, and the P.P.V.T. - with our middle class subjects performing at a more advanced level than the lower class children, (that is, being better able to physically de-center, being able to respond verbally to the Feffer test, scoring higher on the Peabody Picture Vocabulary Test). However, no statistical analysis is reported between these tests and the subjects' choices since the coorelation was insignificant.

G. <u>Problems of the Present Study and Suggestions for Future Study</u>

There were a number of problems incurred in the present study that need to be rectified in order to give us more definite information concerning the child's perception of the nursery teacher.

1) Problems with Video

There were a number of problems with the video, specifically in the production of the video scenes. It was impossible to film the scenes with the same age children as in the sample population; it was even difficult to work with six-year old children as actors in our scenes. Therefore, it is possible that the degree of identification with the child-actors was effected. We do not know if three-year old children differentially identify more or less - or project more or less onto other three-year olds in comparison to six or seven-year olds.

At first it was hoped that the scenes could be filmed in actual classrooms with spontaneous development of episodes in which there would be teachers helping children with expressive and instrumental problems, and where the race of the teacher and that of the children would vary. We soon realized that in order for this to happen, hundreds of hours of video would have to be shot in classrooms with the proper combination of teachers and students present. Therfore, the scenes had to be filmed in controlled and somewhat contrived situations.

Due to the fact that a lot of editing was done in order to

develop the final video sequence, the quality of the video scenes tended to be poor both visually and auditorally. We doubt that the quality effected the actual response since, judging from the children's responses, it was clear that the majority could describe the actions taking place in each video scene. But to make sure, when the experimenter doubted whether the child could discern what was happening, he described the scene to the child before it was shown to him.

Any future study, intending to improve the quality of the films, should have professional video people employed and the scenes filmed in a studio.

2) Problems with Other Instruments

The Feffer Tole-Taking Test proved unuseable as a measure of role-taking and de-centering ability with both lower class and shy children. Response to the Feffer test required extensive verbalization which was difficult for most of the subjects to do. At this time nobody as yet has solved the problem of obtaining a measure of role-taking ability or has broken through the problems posed by ego-centric communication in children. Even acting-out techniques as proposed by Visotsky have proved of limited value.

The Piaget Physical De-Centering Test proved to be a more useful instrument than the Feffer. Almost all the children under-

stood the instructions and responded easily to them. In some cases, however, lower-class children did not know the names of some of the colors and time was spent in teaching them.

Finally, our results were effected by the fact that we did not have an adequate sample of children. Our white subjects were mainly from the middle class while our black subjects were totally from the lower class. Had we been able to obtain black children from the middle income and more white children from the low income brackets, our results would be a more inclusive representation of the nursery school population.

H. Summary and Conclusions

The study was conducted to determine which variables, present among nursery school children, influence a child's perception of his teacher's role as problem solver. The variables tested for included: 1) the race of the teacher; 2) the nature of the problem - one involving personal needs (affective) or one involving class-room achievement (instrumental); 3) the race of the child needing help; 4) the sex of the child needing help.

The subjects, totalling sixty-one, included twenty-six males and thirty-five females. By sex and race there were eight black males, sixteen black females, eighteen white males, and nineteen white females. They ranged in age from three and one-half years to five years; the median age was three years and

ten months.

The subjects were shown twelve video taped scenes, each containing two children and one teacher - the children being of the same sex but of different race. Eight of the twelve scenes depicted one child with an instrumental problem - the other with an affective problem. The other four scenes were conflict scenes, depicting two children both trying to get control of the same toy. After showing each scene, the subject was asked to state which child the teacher would help.

It was found that the white subjects from the middle class chose children with affective problems, whereas black subjects from the lower class did not preferentially choose children with either affective or instrumental problems. The results of the conflict scenes proved not useful to this study.

The choices made by the middle class subjects corroborates Hess's findings that learning for children of this class is influenced by an affective (or instructive) attitude. Since our findings prove that nursery school children of a middle class population do expect the teacher to solve affective problems, clearly a teacher at this level must be able to provide for such needs.

Results for black children of the lower class were not conclusive. Possibly, a larger sample would have yielded results similar to Hess's conclusions about the influence of the instrumental (or imperative) attitude for lower-class children. On the

other hand, these children may view the teacher's role as inclusive - not limited to solving only one type of problem. Further research is needed to produce a conclusive answer.

Whether subjects are from the lower or middle classes, evidence of their perception of the teacher's role will be tenuous until a better measurement of ego-centrism can be developed, since an accurate indicator would differentiate between those children who can empathize and those who cannot. The child who can empathize knows how someone else who has a stomach ache or who can't solve a puzzle feels. He can also distinguish between the role of another - in this case, his teacher - and himself. When asked a sufficient number of times to choose which of two problems his teacher would solve, he would show a predilection for either the affective or instrumental problem, depending upon which attitude had influenced his learning and, accordingly, his definition of the role of the person teaching him. Thus an accurate measure of ego-centrism would likely produce results that would both differentiate, by attitude, children from the lower and middle classes and indicate, as a consequence, preferences that would be more dominant than those contained in this pilot study.

From these findings, it is clear that neither the teacher's race nor the race or sex of the child helped influence a child's perception of his nursery school teacher. For middle class children, the only variable limiting the teacher's otherwise inclusive role is her principle responsibility to solve affective problems.

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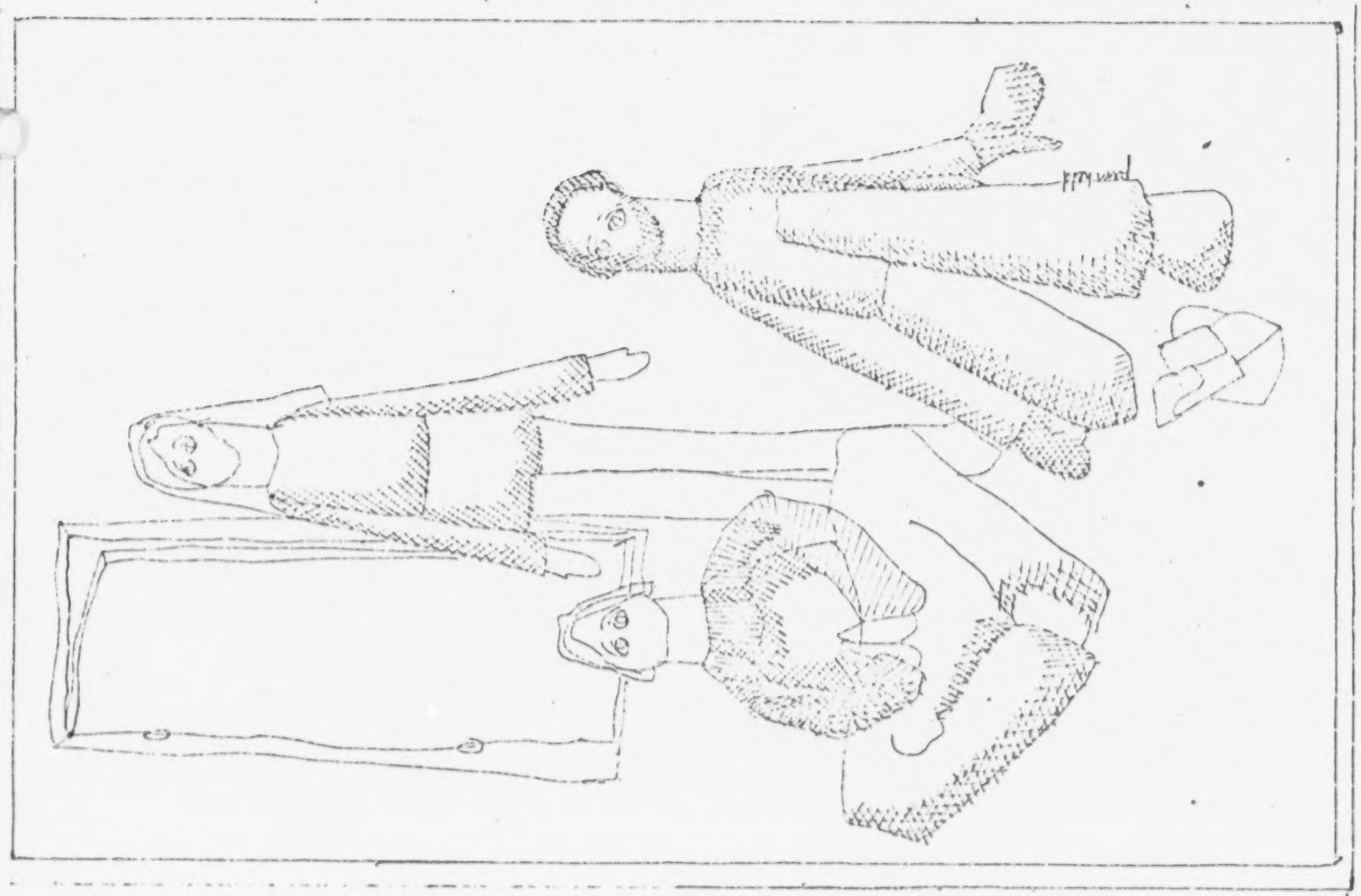
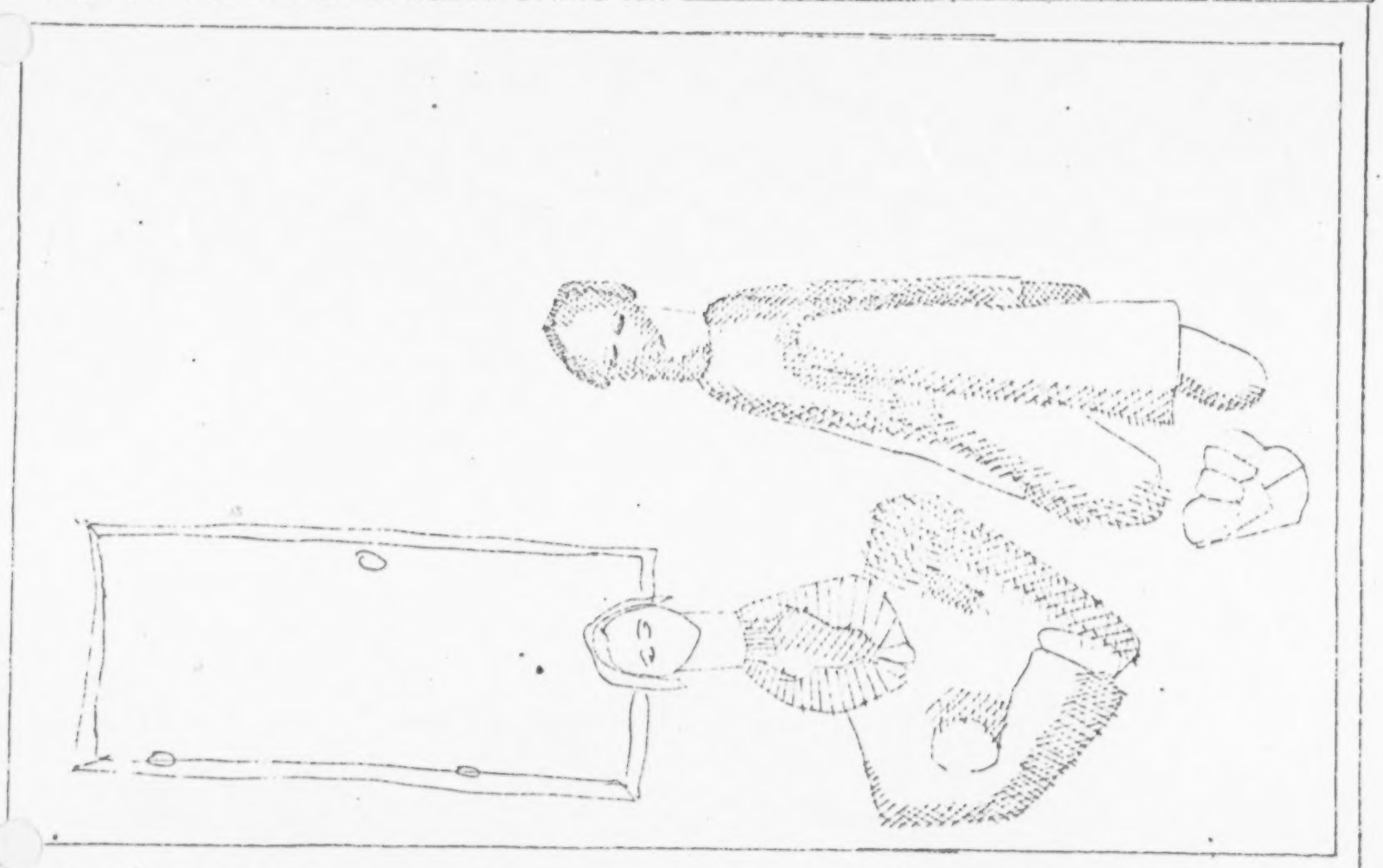
APPENDIX

Pictorial Representations of the

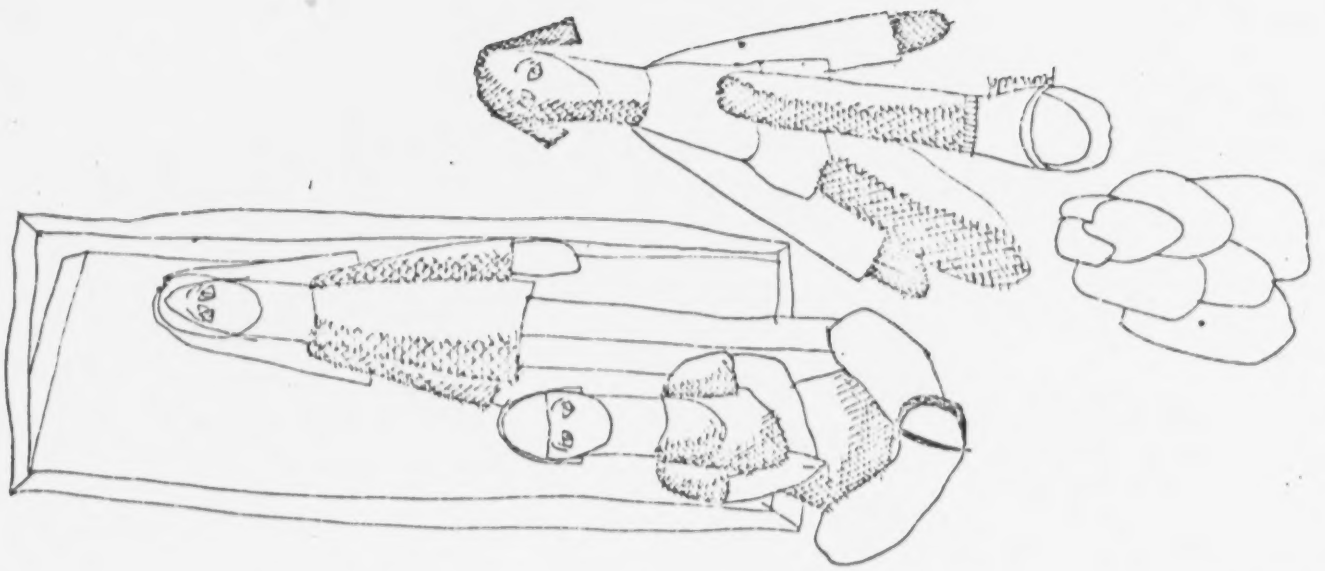
Twelve Video Scenes

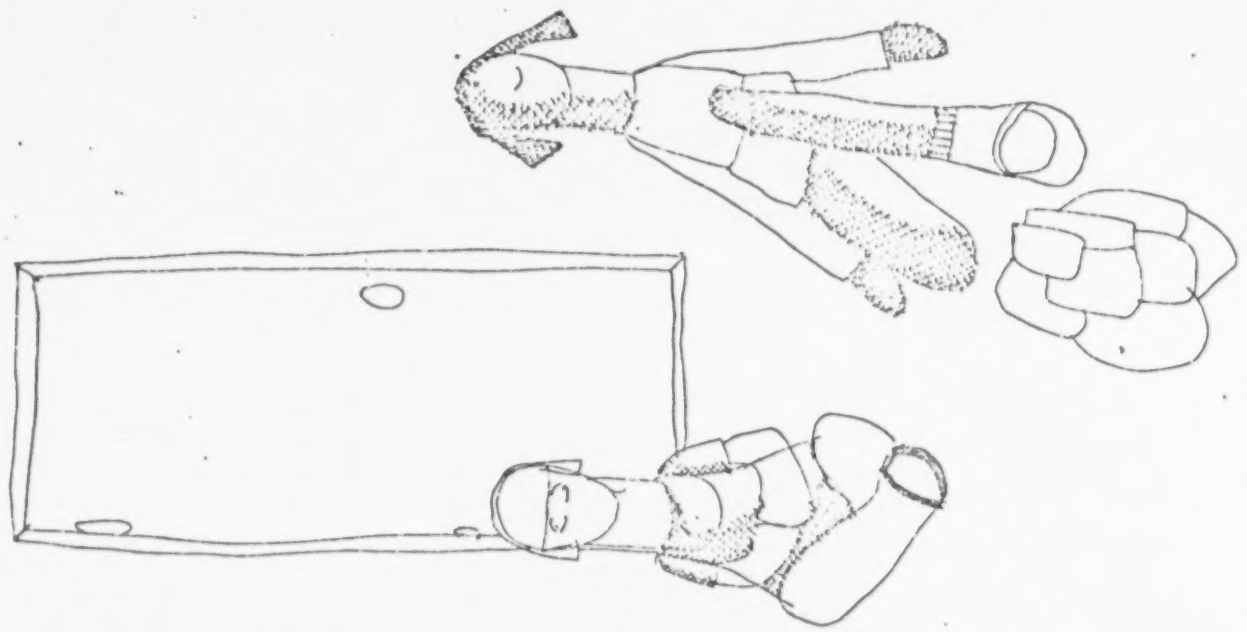




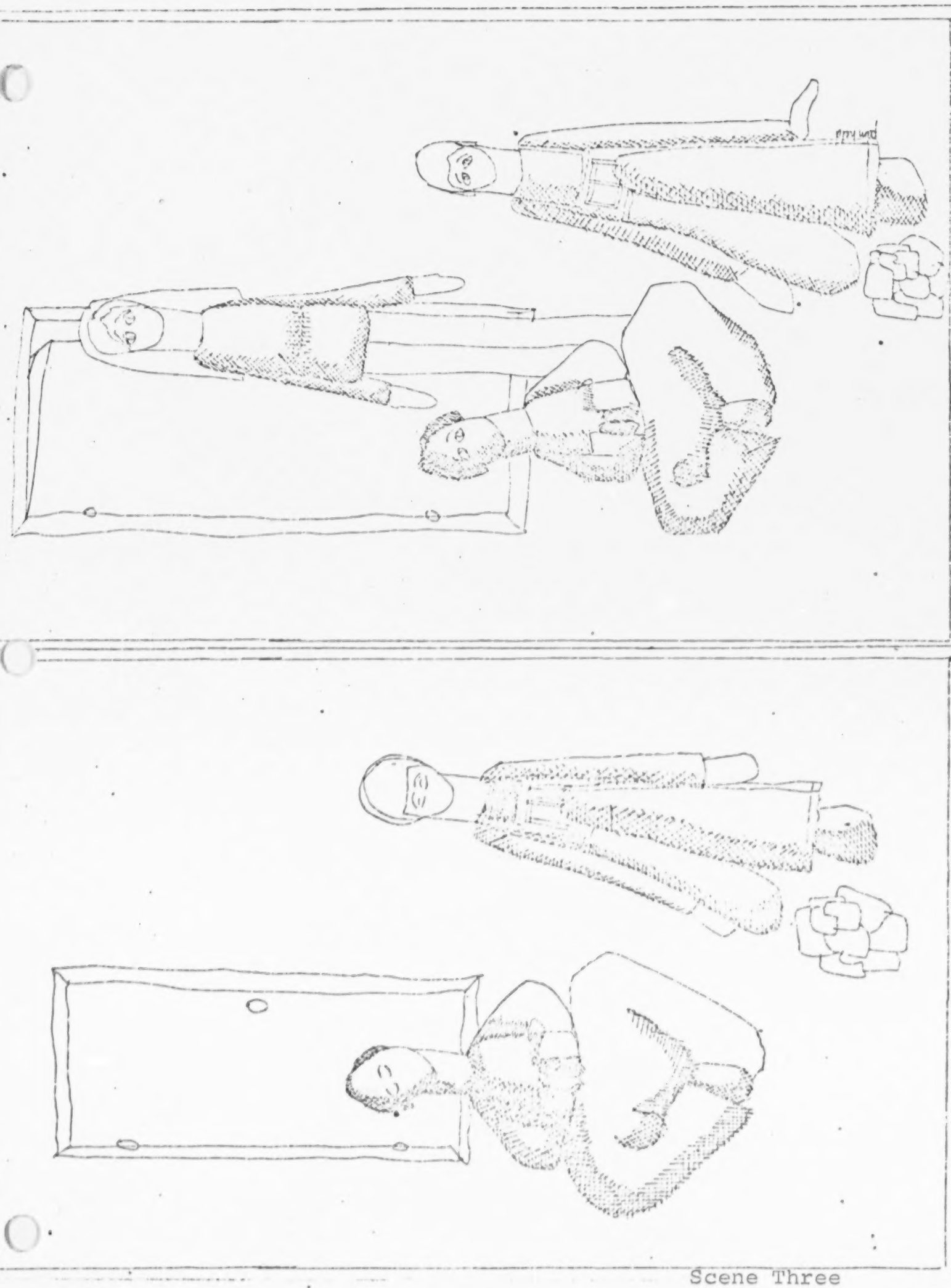
Scene One

white male - affective
black male - instrumental
white teacher

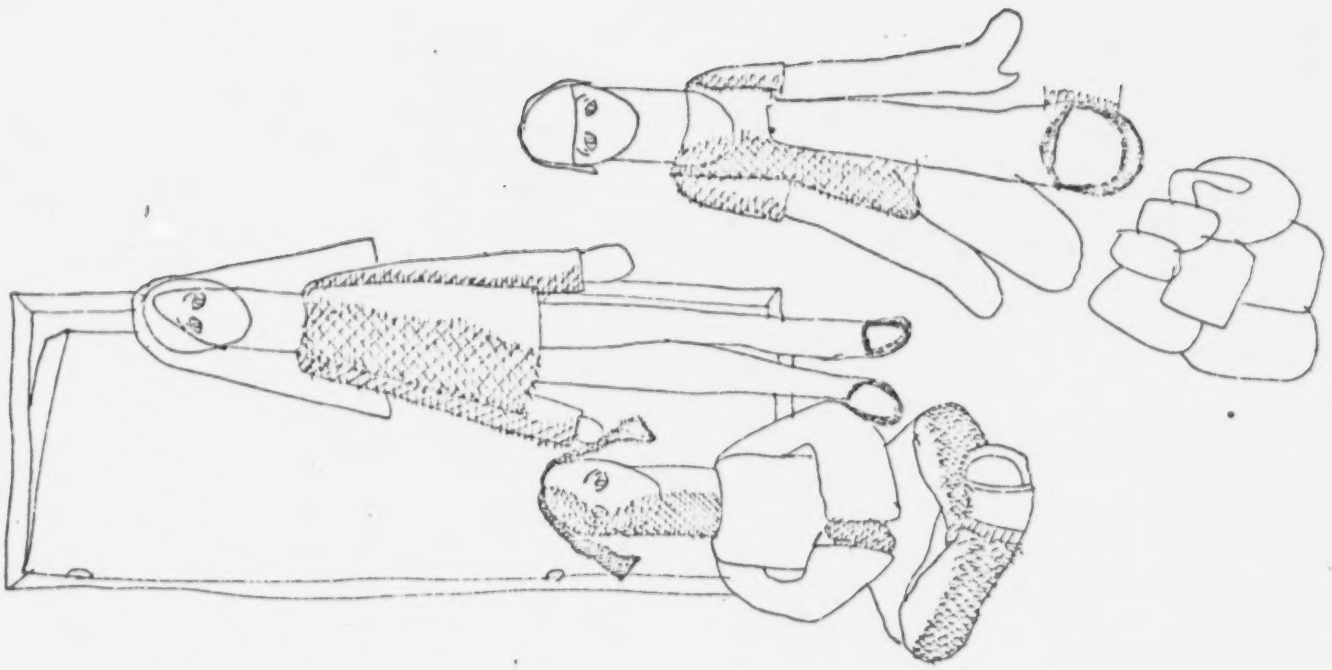


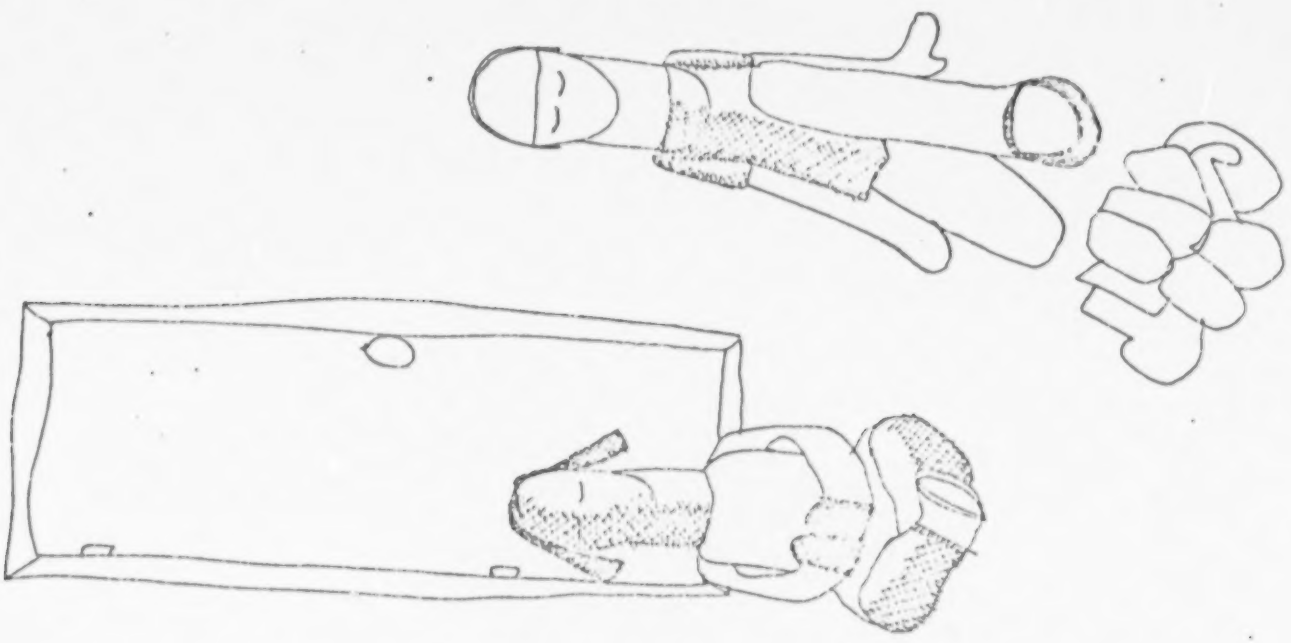


Scene Two
White Female - Affective
Black Female - Instrumental
White Teacher

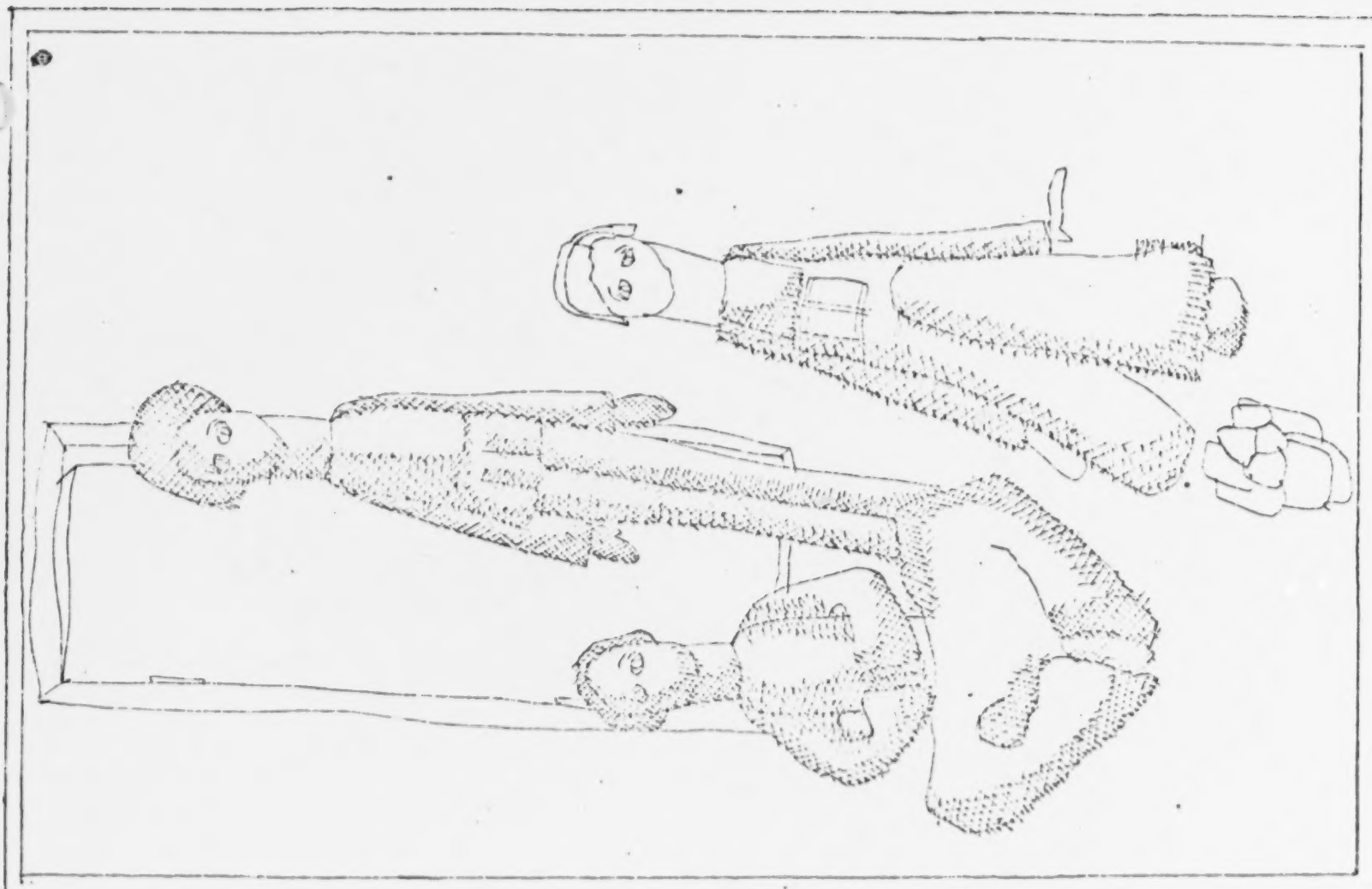


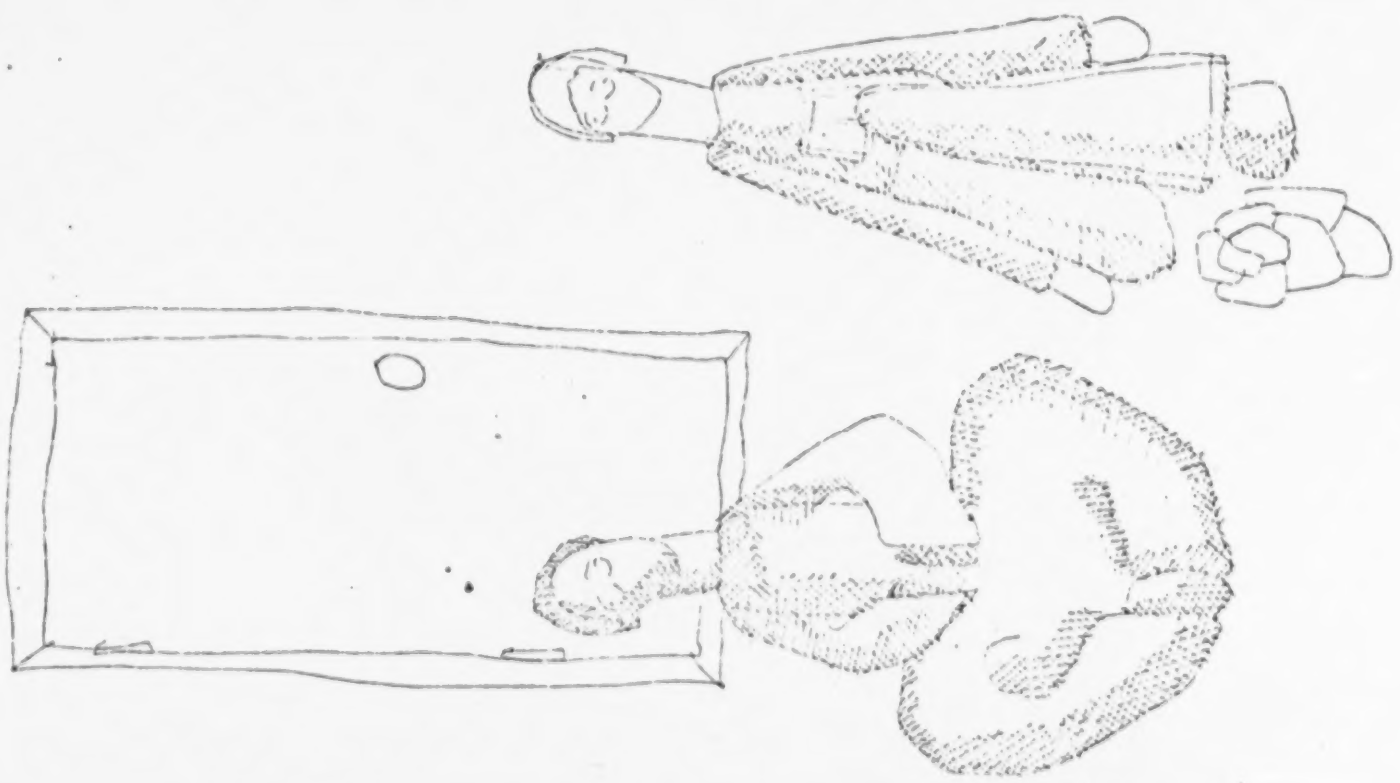
Scene Three
Black Male - Affective
White Male - Instrumental
White Teacher



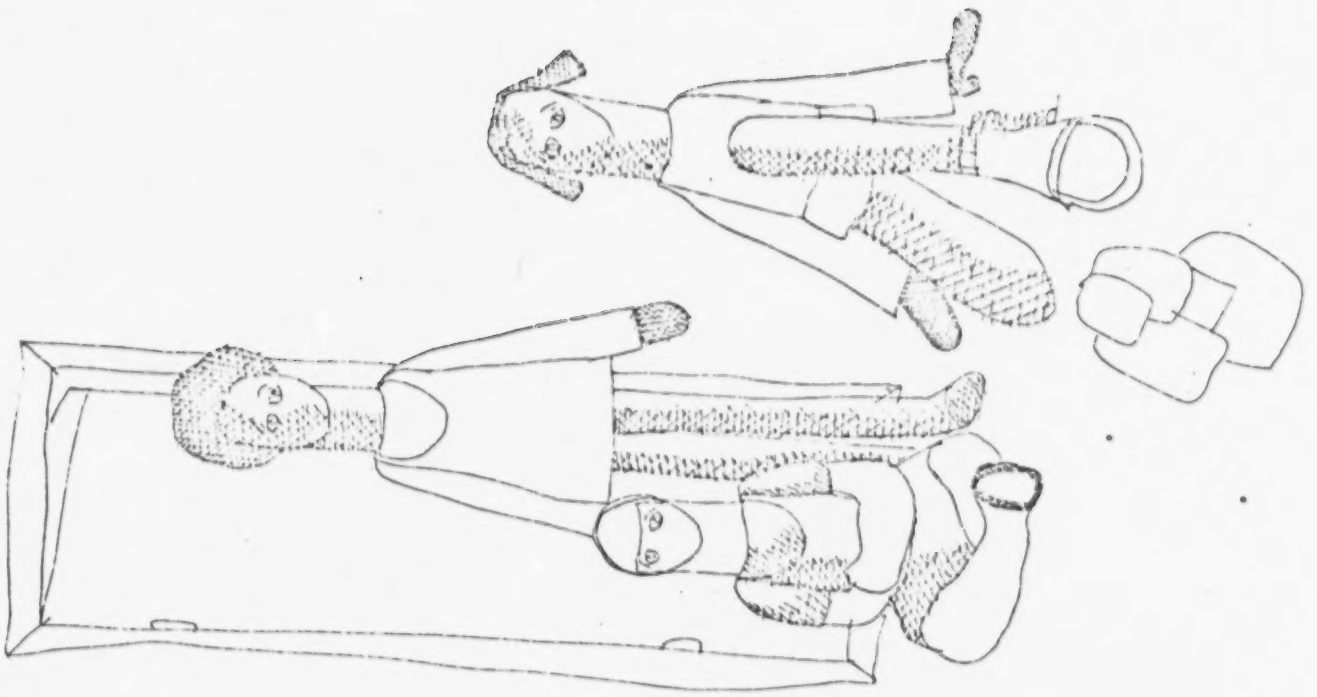


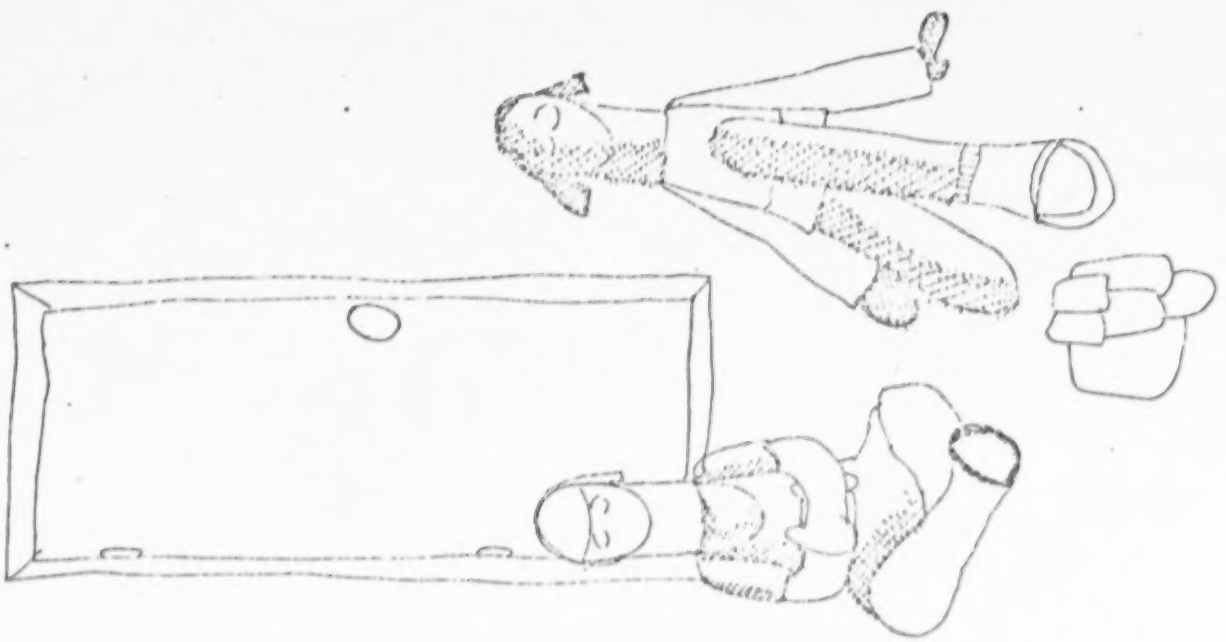
Scene Four
Black Female - Affective
White Female - Instrumental
White Teacher



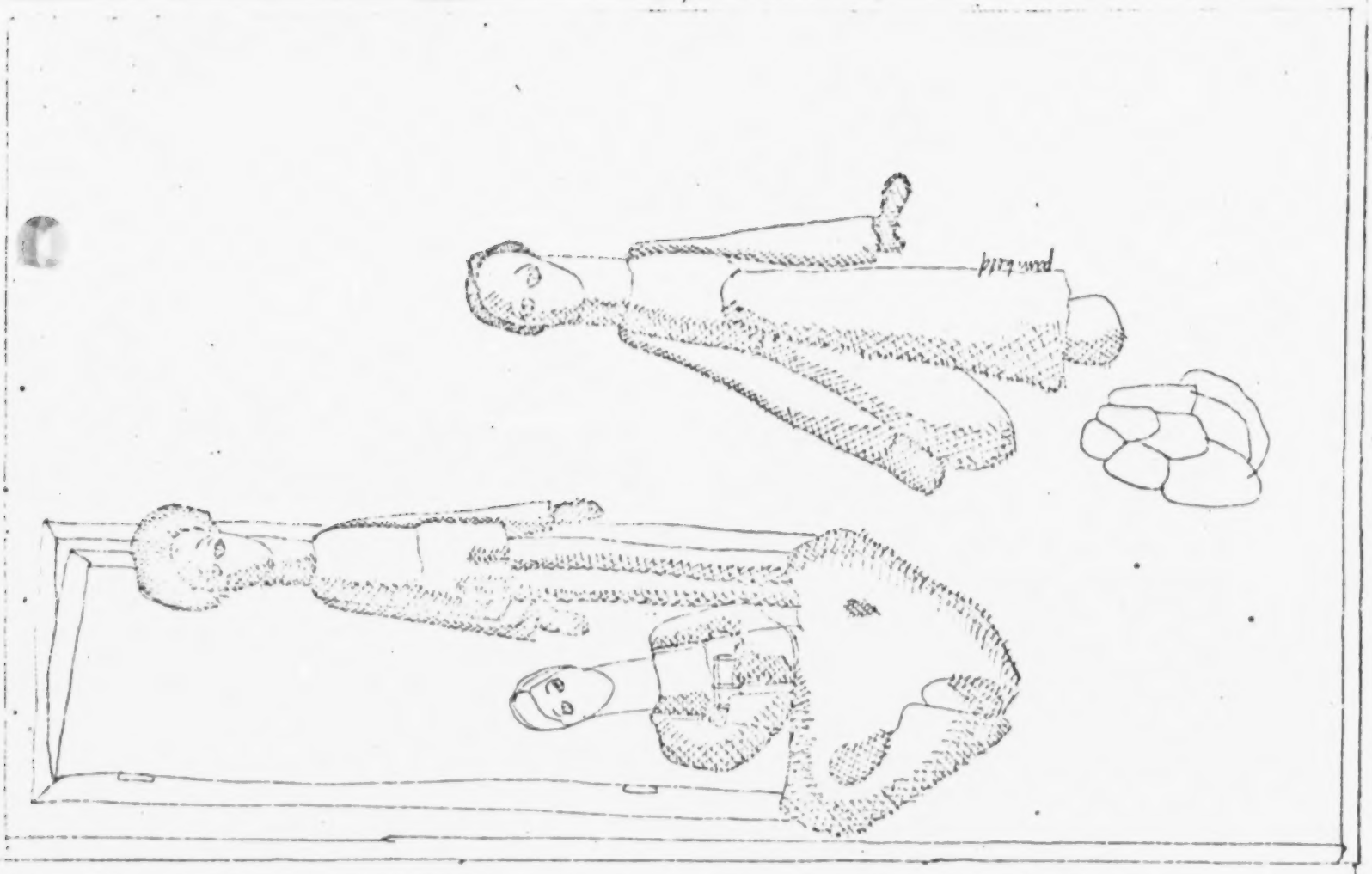


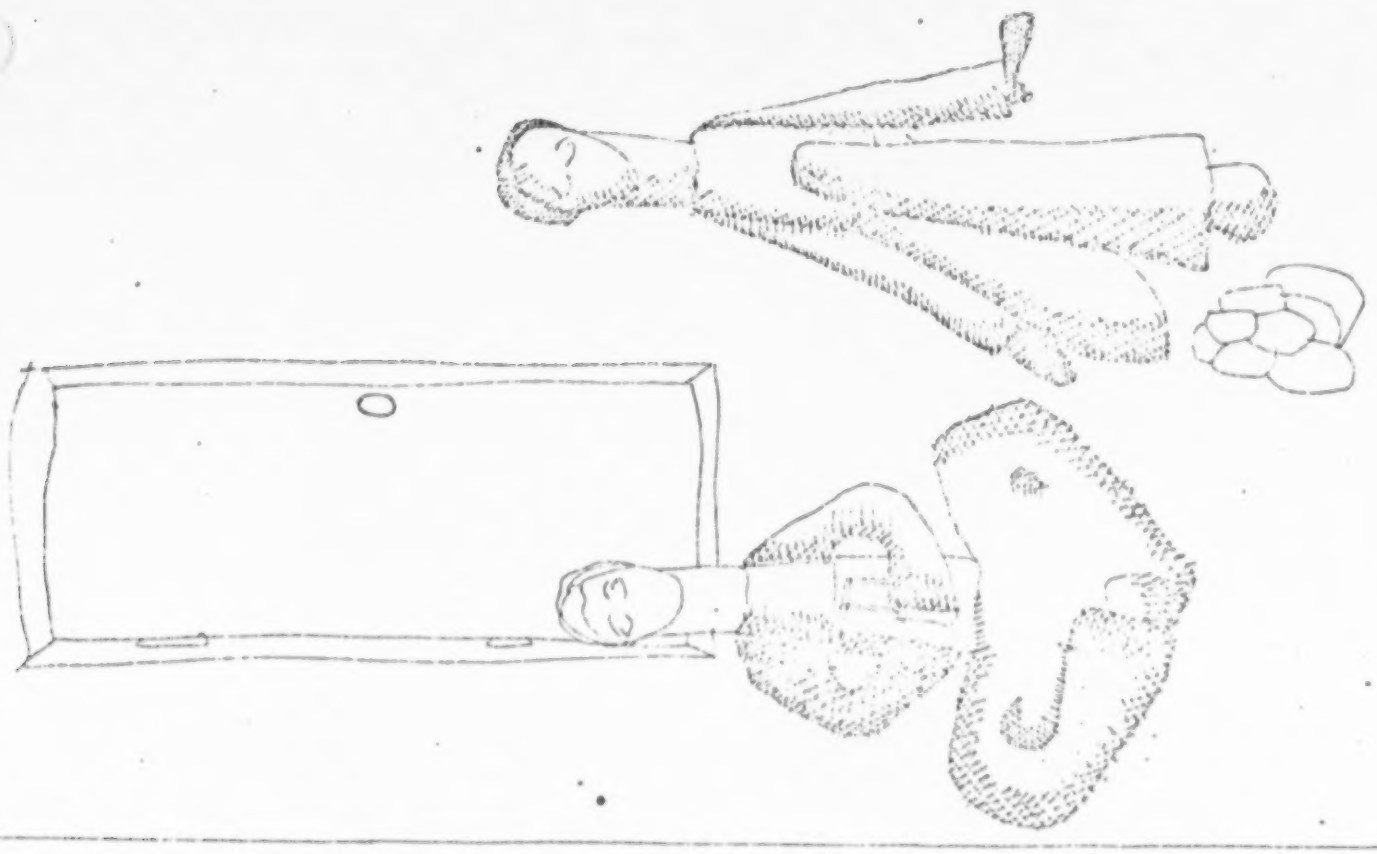
Scene Five
Black Male - Affective
White Male - Instrumental
Black Teacher



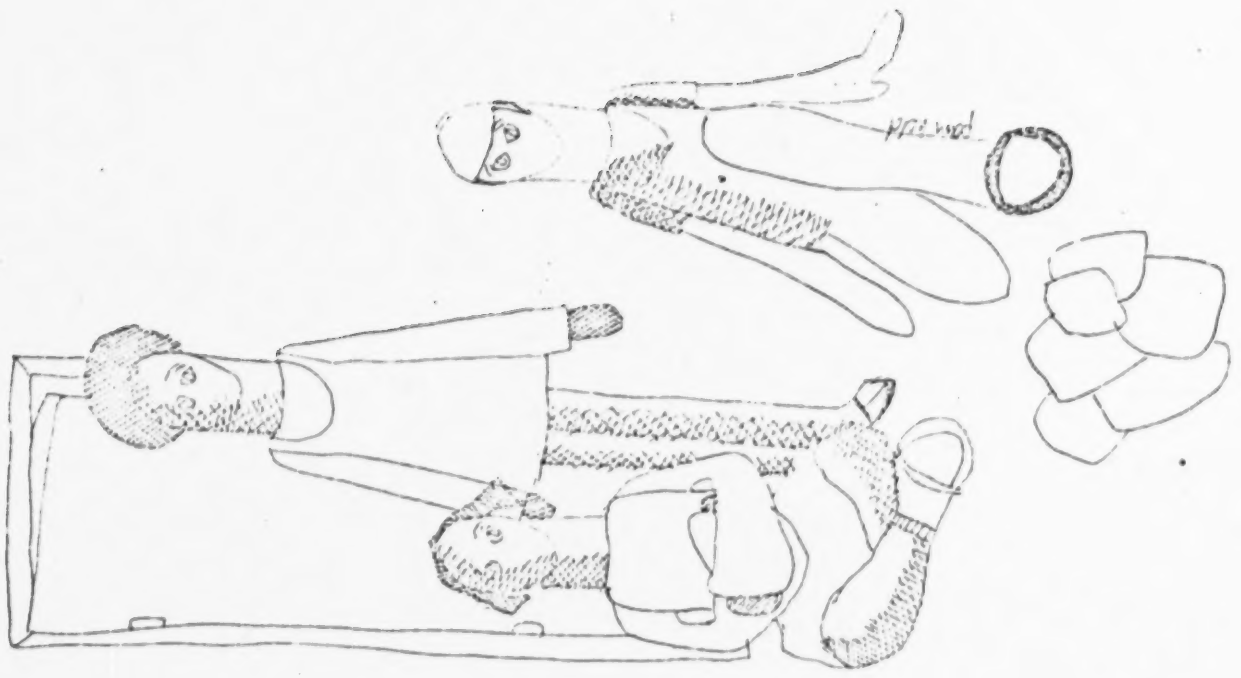


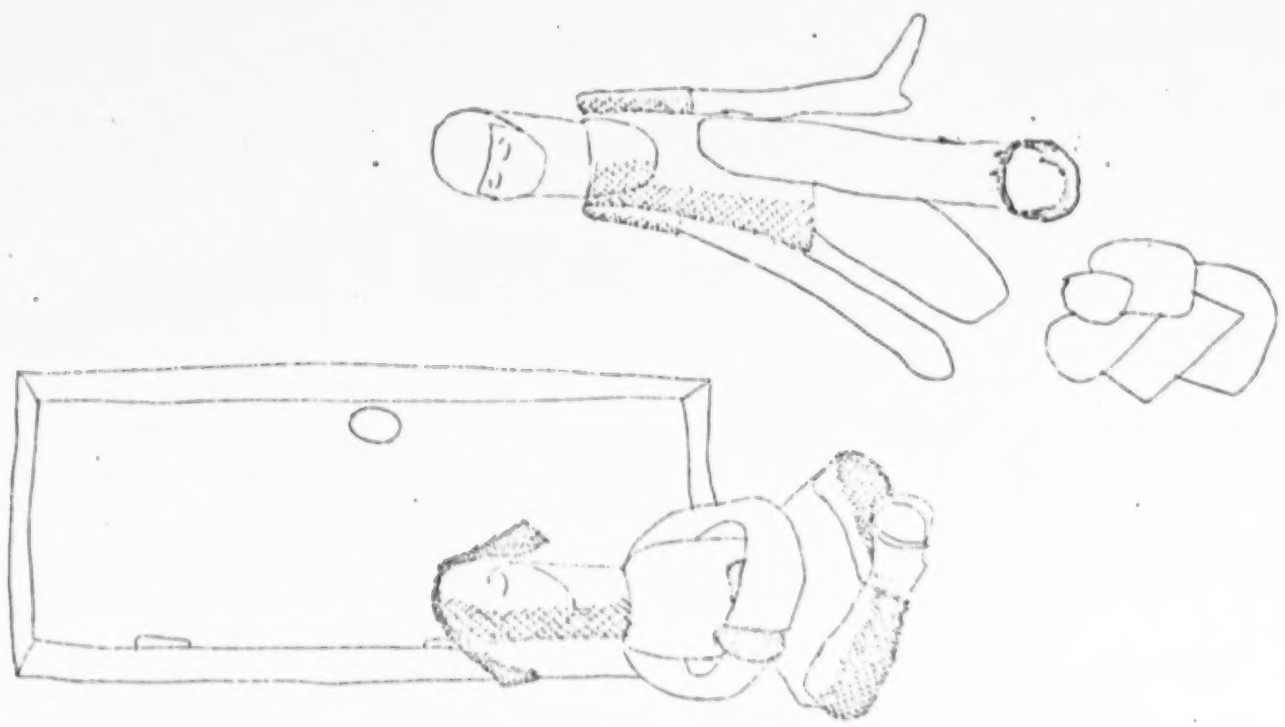
Scene Six
White Female - Affective
Black Female - Instrumental
Black Teacher



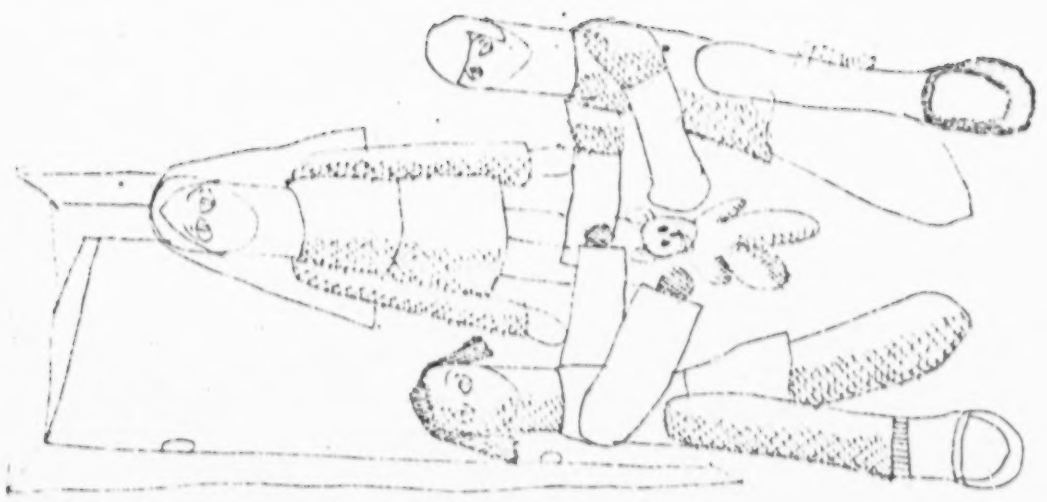


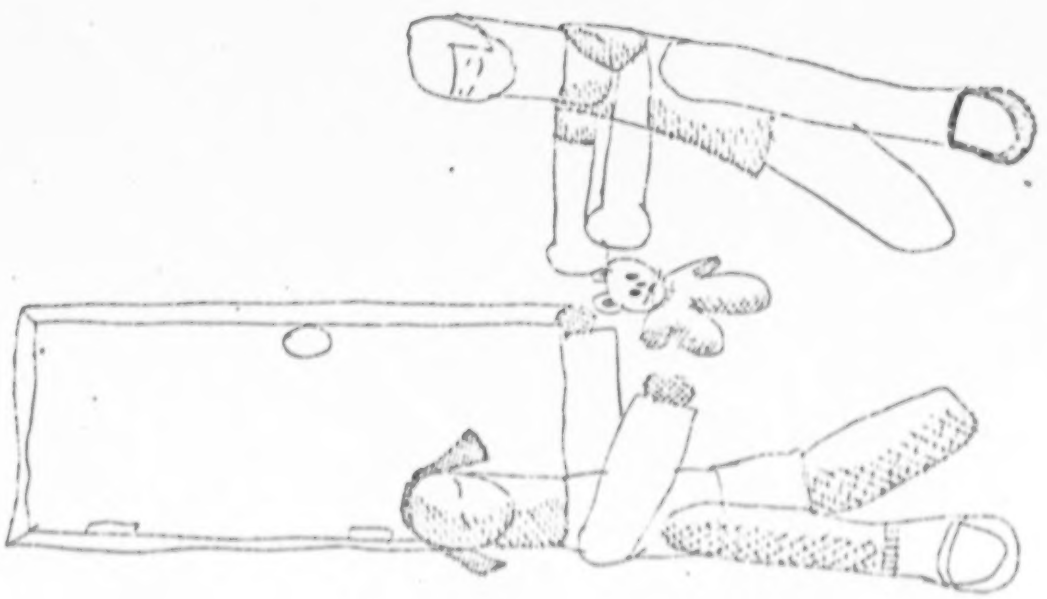
Scene Seven
White Male - Affective
Black Male - Instrumental
Black Teacher



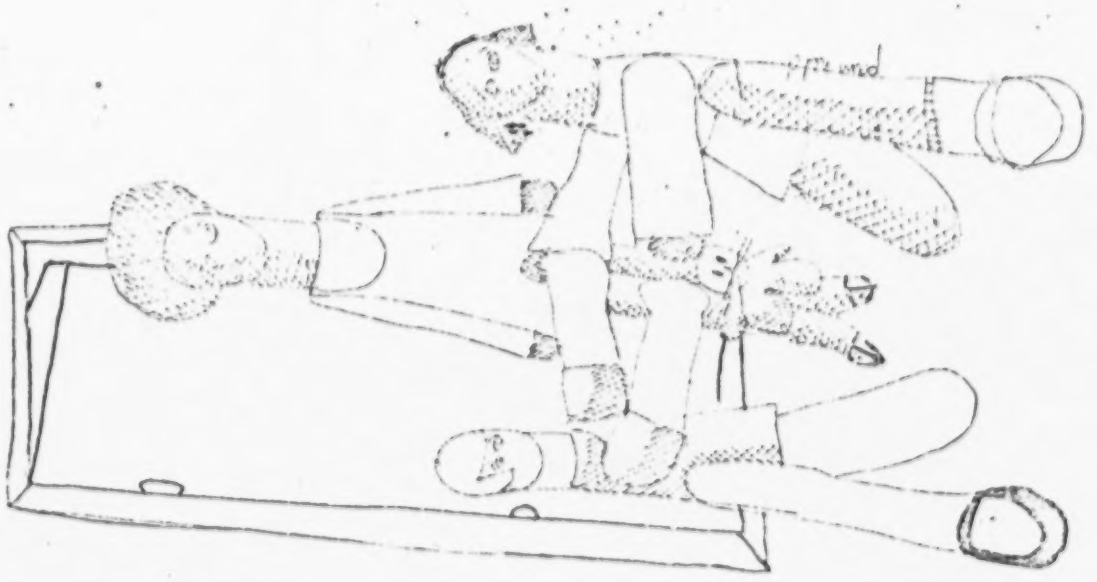


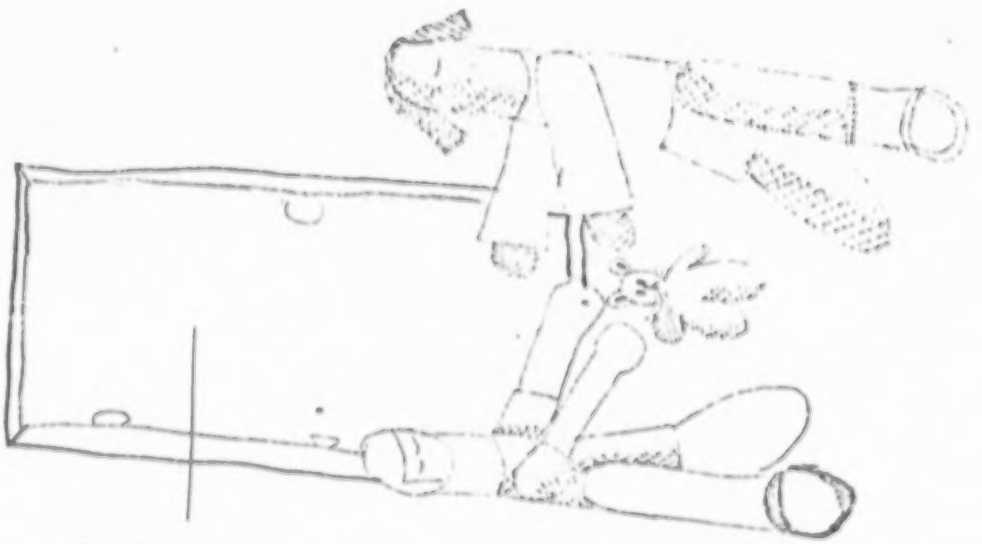
Scene Eight
Black Female - Affective
White Female - Instrumental
Black Teacher





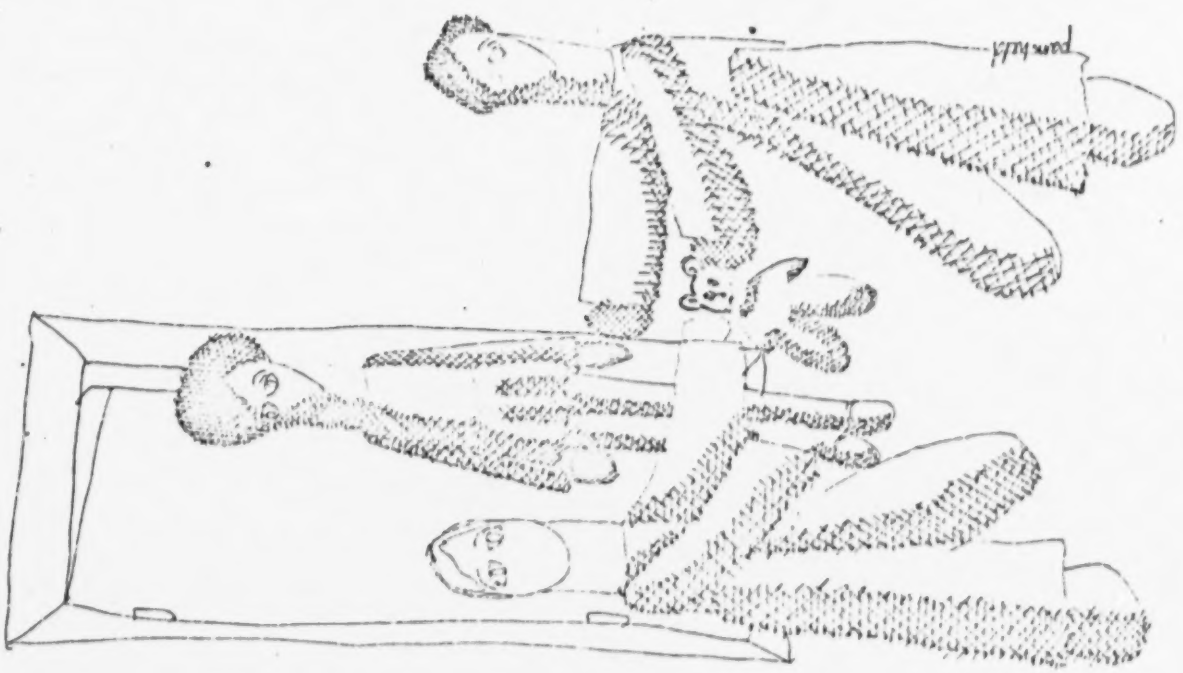
Scene Nine
Black Female and White Female
in Conflict
White Teacher

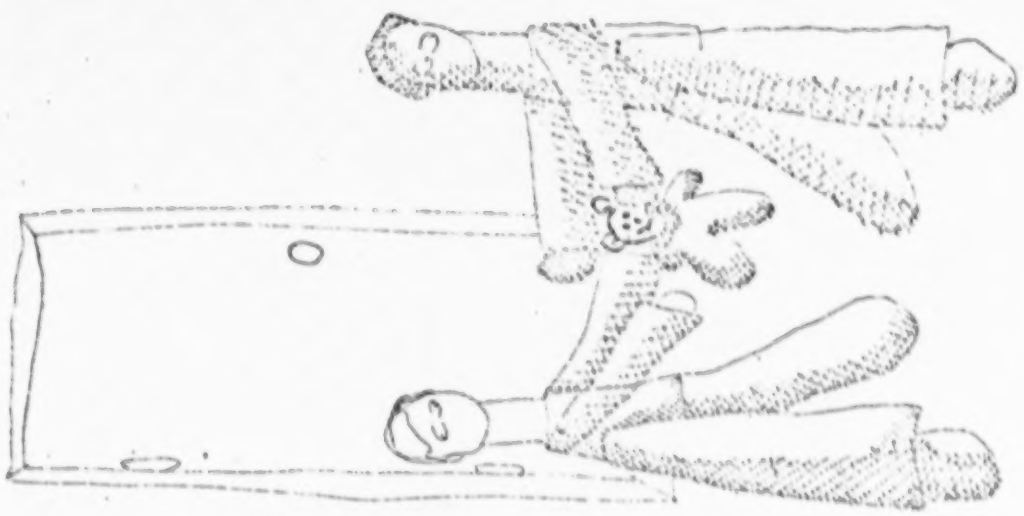




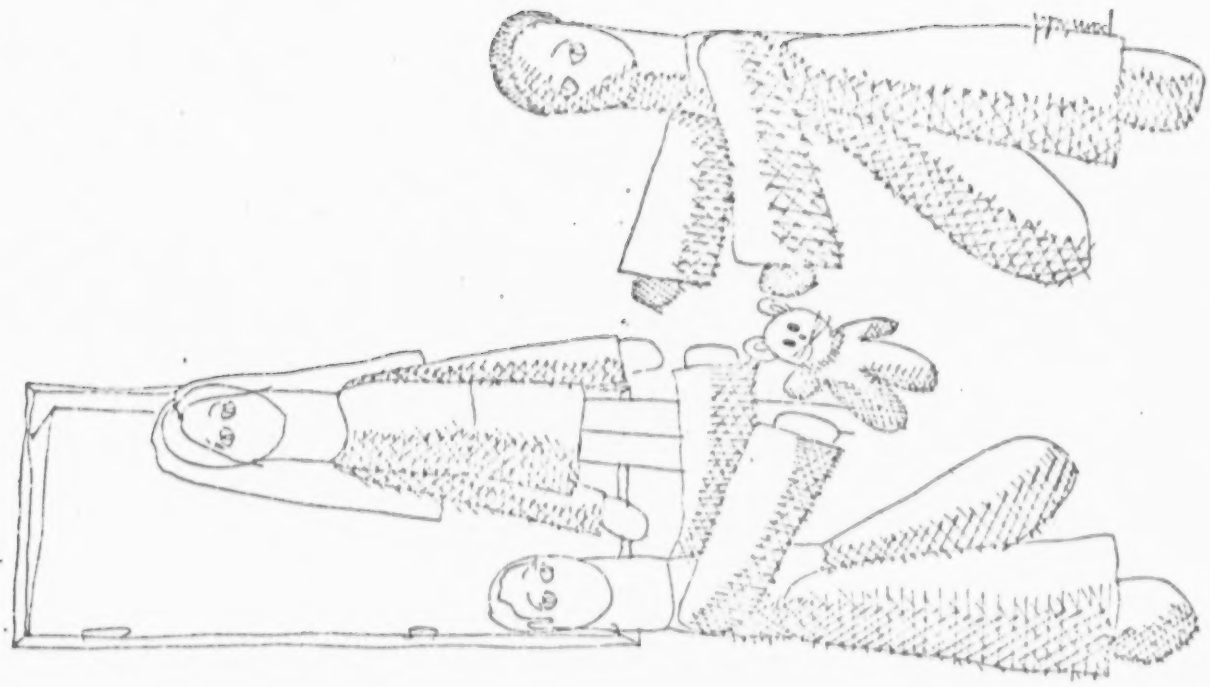
Scene Ten

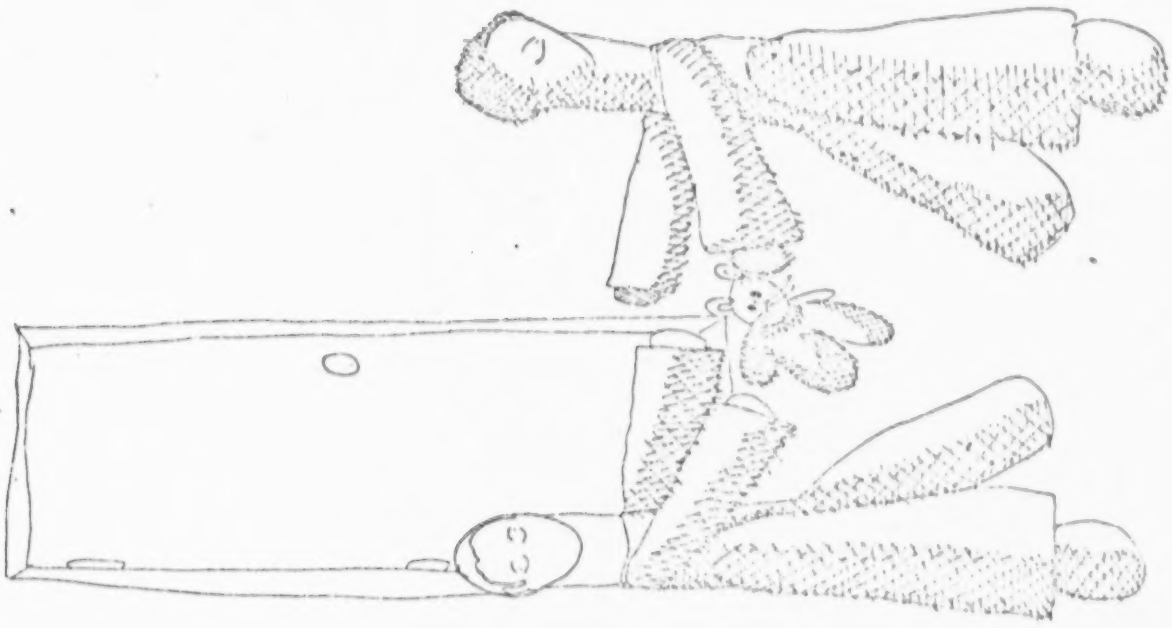
White Female and Black Female in Conflict
Black Teacher





Scene Eleven
White Male and Black Male in Conflict
Black Teacher





Scene Twelve
White Male and Black Male in
Conflict
White Teacher